

IN THE CLAIMS

Please amend the claims as follows:

Claim 1 (Currently Amended) An image processor comprising:

an image input unit configured to receive [[for receiving]] two-dimensional images;

a motion calculator configured to select [[for selecting]] a motion detecting area for each of ~~two images~~ a first image and a second image received by the image input unit, and configured to calculate [[for calculating]] a motion vector between the two images based on projective data that is acquired by computing, in a predetermined direction, pixel values in the motion detecting areas;

a displacement calculator configured to calculate [[for calculating]] image correlativity between a basic image area of the first image and each area of the second image, the each area of the second image is along the two images in the direction that the motion vector calculated by the motion calculator designates, and configured to calculate for calculating based on the calculated values the amount of pixel displacement between the two images, based on the correlativity calculations; and

an image output unit configured to cut [[for cutting]] away an area from a camera-shake compensation area designated in the second image frame, ~~the area being produced by displacing an image output area in the camera-shake compensation area, by based on~~ the pixel-displacement amount calculated by the displacement calculator, and configured to output [[for outputting]] the area as an image for the image output area of the second image frame.

Claim 2 (Currently Amended) An image processor comprising:

an image input unit configured to receive [[for receiving]] two-dimensional images;

a motion calculator configured to select [[for selecting]] a plurality of motion detecting areas for each of two images received by the image input unit, and configured to calculate [[for calculating]] motion vectors between the two images, with regard to each of the plurality of motion detecting areas, based on projective data that is acquired by computing_x in a predetermined direction_x pixel values in the motion detecting areas;

a conversion/compensation unit configured to calculate [[for calculating]] pivoting and zooming components by means of the plurality of motion vectors calculated by the motion calculator, and configured to apply [[for applying]] pivoting and zooming conversion to the second image, based on the pivoting and zooming components, and configured to acquire [[for acquiring]] a compensated motion vector by subtracting the pivoting and zooming components from the plurality of motion vectors;

a displacement calculator configured to calculate [[for calculating]] the image correlativity between the two images, in a direction that the compensated motion vector designates, and configured to calculate ~~for calculating based on the calculated correlativity values~~ the amount of pixel displacement between the two images, based on the correlativity calculations; and

an image output unit configured to cut [[for cutting]] away an area from a camera-shake compensation area designated in [[the]] a second frame, the area being produced by displacing an image output area in the camera-shake compensation area, by the pixel-displacement amount calculated by the displacement calculator, and configured to output [[for outputting]] the area as an image for the image output area of the second frame.

Claim 3 (Currently Amended) An image processing method comprising:

an image inputting step of receiving two-dimensional images;

a motion calculating step of selecting a motion detecting area for each of ~~two images~~ a first image and a second image received by the image input unit, and of calculating a motion vector between the two images based on projective data that is acquired by computing_x in a predetermined direction_x pixel values in the motion detecting areas;

a displacement calculating step of calculating the image correlativity between a basic image area of the first image and each area of the second image, the each area of the second image is along the two images in the direction that the motion vector calculated by the motion calculator designates, and of calculating the amount of pixel displacement ~~between the two images~~, based on the ~~calculated correlativity values~~ correlativity calculations; and

an image outputting step of cutting away an area from a camera-shake compensation area designated in the second image frame, ~~the area being produced by displacing an image output area in the camera-shake compensation area, based on~~ by the pixel-displacement amount calculated by the displacement calculator, and of ~~of~~ outputting the area as an image for the image output area of the second image frame.

Claim 4 (Currently Amended) An image processing method comprising:

an image inputting step of receiving two-dimensional images;

a motion calculating step of selecting a plurality of motion detecting areas for each of two images received by the image input unit, and of calculating motion vectors between the two images, with regard to each of the plurality of motion detecting areas, based on projective data that is acquired by computing_x in a predetermined direction_x pixel values in the motion detecting areas;

a first conversion/compensation step of calculating pivoting and zooming components by means of the plurality of motion vectors calculated by the motion calculator, and of

applying pivoting and zooming conversion to the second image based on the pivoting and zooming components;

a second conversion/compensation step of calculating a compensated motion vector by subtracting the pivoting and zooming components from the plurality of motion vectors;

a displacement calculating step of calculating the image correlativity between the two images, in a direction that the compensated motion vector designates, and of ~~[[for]]~~ calculating the amount of pixel displacement between the two images, based on the ~~calculated values~~ correlativity calculations; and

an image outputting step of cutting away an area from a camera-shake compensation area designated in ~~[[the]]~~ a second frame, the area being produced by displacing an image output area in the camera-shake compensation area, by the pixel-displacement amount calculated by the displacement calculator, and of ~~[[for]]~~ outputting the area as an image for the image output area of the second frame.

Claim 5 (Currently Amended) ~~A recording medium in which a program for implementing the steps recited in claim 3 is stored~~ A computer readable tangible storage medium encoded with a computer readable program configured to cause an information processing apparatus to execute a method, the method comprising:

an image inputting step of receiving two-dimensional images;

a motion calculating step of selecting a motion detecting area for each of a first image and a second image received by the image input unit, and of calculating a motion vector between the two images based on projective data that is acquired by computing, in a predetermined direction, pixel values in the motion detecting areas;

a displacement calculating step of calculating the image correlativity between a basic image area of the first image and each area of the second image, the each area of the second

image is along the direction that the motion vector calculated by the motion calculator designates, and of calculating the amount of pixel displacement, based on the correlativity calculations; and

an image outputting step of cutting away an area from a camera-shake compensation area designated in the second image, based on the pixel-displacement amount calculated by the displacement calculator, and of outputting the area as an image for the image output area of the second image.

Claim 6 (Currently Amended) ~~A recording medium in which a program for implementing the steps recited in claim 4 is stored~~ A computer readable tangible storage medium encoded with a computer readable program configured to cause an information processing apparatus to execute a method, the method comprising:

an image inputting step of receiving two-dimensional images;

a motion calculating step of selecting a plurality of motion detecting areas for each of two images received by the image input unit, and of calculating motion vectors between the two images, with regard to each of the plurality of motion detecting areas, based on projective data that is acquired by computing, in a predetermined direction, pixel values in the motion detecting areas;

a first conversion/compensation step of calculating pivoting and zooming components by means of the plurality of motion vectors calculated by the motion calculator, and of applying pivoting and zooming conversion to the second image based on the pivoting and zooming components;

a second conversion/compensation step of calculating a compensated motion vector by subtracting the pivoting and zooming components from the plurality of motion vectors;

a displacement calculating step of calculating the image correlativity between the two images, in a direction that the compensated motion vector designates, and of calculating the amount of pixel displacement between the two images, based on the correlativity calculations; and

an image outputting step of cutting away an area from a camera-shake compensation area designated in a second frame, the area being produced by displacing an image output area in the camera-shake compensation area, by the pixel-displacement amount calculated by the displacement calculator, and of outputting the area as an image for the image output area of the second frame.